REMARKS

Claims 13-31 are pending in the application.

Reconsideration of the rejection of claims 13-15 and 20-23 under 35 U.S.C. 102(b) and 35 U.S.C. 102(a) as being anticipated by US 6,842,808 to Weigl et al, as a Pre-Grant Publication US 2001I0018720, published on August 30, 2001 is respectfully requested.

Claims 13 and 20 are directed to a cycle-based communication system and method for transmitting useful data between users of the system, including a data bus and the users connected to it, in which the data transmission is effected within cyclically repeating timeframes with at least two timeslots each, and each timeslot is intended for transmitting one message, one message contains at least some of the useful data, and each message is assigned an identifier, characterized in that the identifier is stored in each message as part of the message; that each message additionally includes data about the cycle; that the timeslots have a fixed length; and that at least one of the timeslots of one timeframe can be used, in various cycles, for offset transmission of different messages that are not intended for transmission in every cycle, *wherein the identifier has either additional cycle data integrated therewith, or an independent cycle counter.*

The examiner relies on Weigl et al for disclosing a method and a device for the exchange of data in messages, including a data bus and the users connected to it, and all of the limitations of claims 13-15 and 20-23.

The principal idea of the present invention is to transmit messages from different bus users in the same time slot of a data frame in different communication cycles. The invention

uses the same time slots in the same data frames for the transmission of messages from different bus users in different communication cycles. By doing so, the efficiency of the data bus can be significantly enhanced because messages, which are not transmitted in each communication cycle, can be transmitted in the same time slot of the same data frame in subsequent communication cycles. In other words, the present invention allows a kind of multiplexing in the time slots of the data frames.

Something similar was introduced for the so-called Time Triggered Controller Area Network (TTCAN), which is disclosed in paragraphs [0011] to [0014], [0026] and [0045] to [0051] of US 2001/0018720 Al to Weigl et al. The differences between the disclosure of US 2001/0018720 Al and the present invention are the following:

In TTCAN the cycle-count is transmitted in the reference-messages at the beginning of each cycle only. In contrast thereto, in FlexRay (the invention) *the cycle-count is transmitted in each frame.* There is no reference-message or a similar kind of message transmitted at the beginning of each cycle in FlexRay. This means that the multiplexing in the time slots of the data frames known from TTCAN cannot simply be transferred to FlexRay, because FlexRay has no reference-message. Therefore, a person skilled in the art would have to recognize the problems and adapt the FlexRay communication system in order to allow the multiplexing in the time slots of the data frames. US 2001/0018720 Al does not render obvious any kind of adaption of the known TTCAN communication system in order to allow the multiplexing in the time slots of the data frames in a FlexRay communication system, too. Therefore, it is apparent the present invention is new and inventive in respect to the prior art.

For realizing the present invention *either an additional cycle datum MUX is integrated with the identifier ID of the messages (see figure 3a), or a separate cycle counter (see figure 3b) can be used. In either way, each frame contains additional information which allows a distinction of the various cycles from one another.* With the present invention it is possible to provide a kind of multiplexing of those messages, which do not have to be transmitted in each communication cycle, in a FlexRay data transmission system. This feature is described at least in paragraphs [0019], [0020], [0052], [0053].

Accordingly, as Weigl et al lacks the inclusion of an additional cycle data or an independent cycle counter being integrated therewith, the invention cannot be anticipated as required under 35 USC 102. Withdrawal of the rejection is respectfully requested.

Reconsideration of the rejection of claims 16-19 and 24-41 under 35 U.S.C. 103(a) as being obvious over Weigl et al in view of US Patent No. 6,606,670 to Stoneking et al is respectfully requested.

The examiner relies on Weigl et al for disclosing a method and a device for the exchange of data in messages, including a data bus and the users connected to it, and all of the limitations of claims 13-15 and 20-23. Stoneking et al is relied upon for disclosing the elements lacking in Weigl et al with respect to claims 16-19 and 24-41.

Weigl et al is deficient in anticipating the present invention as discussed above. However, the addition of Stoneking does not make up for the shortcomings of Weigl et al. Neither Weigl et al nor Stoneking disclose or suggest when taken alone or combined the cycle-based communication system and method for transmitting useful data between users of
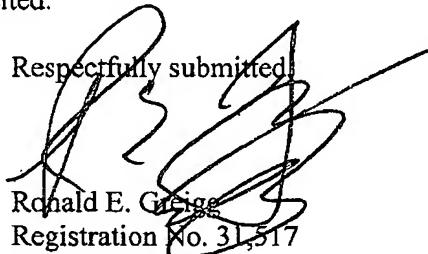
the system, including an identifier stored in each message as part of the message, wherein the

identifier has either additional cycle data integrated therewith, or an independent cycle

counter.

Accordingly, the invention is not rendered obvious under 35 USC 103(a) and

withdrawal of the rejection is respectfully requested.

The above amendments are being made to place the application in better condition for

examination, and include only removal of the references to the Figures, as suggested by the

examiner.

Entry of the amendment is respectfully solicited.

Respectfully submitted,

Ronald E. Greigg
Registration No. 31,517
Attorney of Record
CUSTOMER NO. 02119

GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street
Suite One
Alexandria, VA 22314

Telephone: (703) 838-5500
Facsimile: (703) 838-5554

REG/JAK/ncr

J:\Dreiss, Fuhlendorf\04.81\Reply to 9-05-08 OA.wpd